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COVER: Eastern bluebirds. Painting by the renowned artist, Richard Sloan. Used by permission of the Griggsville Wild Bird Society.

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Golden eagle. Leonard Lee Rue

IT WAS THE LAST DAY OF MAY, the weather was glorious and late spring at its full flood, school was out, the garden pretty well planted and Memorial Day guests had departed. My dad said, "Let's go to the mountains? So we did—to North Fork Mountain ten miles west of Franklin in Pendleton County.

That was the day of the golden eagles. We had scarcely begun the scramble up to the white sandstone ledges above U.S. 33 when we began seeing them soaring above us. All that day these glorious creatures were cloft, gliding on motionless wings from one rocky overlook to another, or sitting on some exposed crag from

which they seemed to enjoy the view as much as we did. We were never certain how many we saw that day, but we do know that we had seven in sight at one time. My sister and I surprised one on a rocky ledge within seventy-five feet of us.

Some, but not all, were in plumage stages which showed white patches in their wings. Golden eagles do not have the white heads and tails of adult bald eagles, but the white wing patches are conspicuous in some. When we could see them close-up, we could spot another difference—golden eagles are fully feathered on the legs clear to the toes; bald eagles have bare shin bones above

Eagles and falcons vanished in just one generation

GOLDENS

ARE

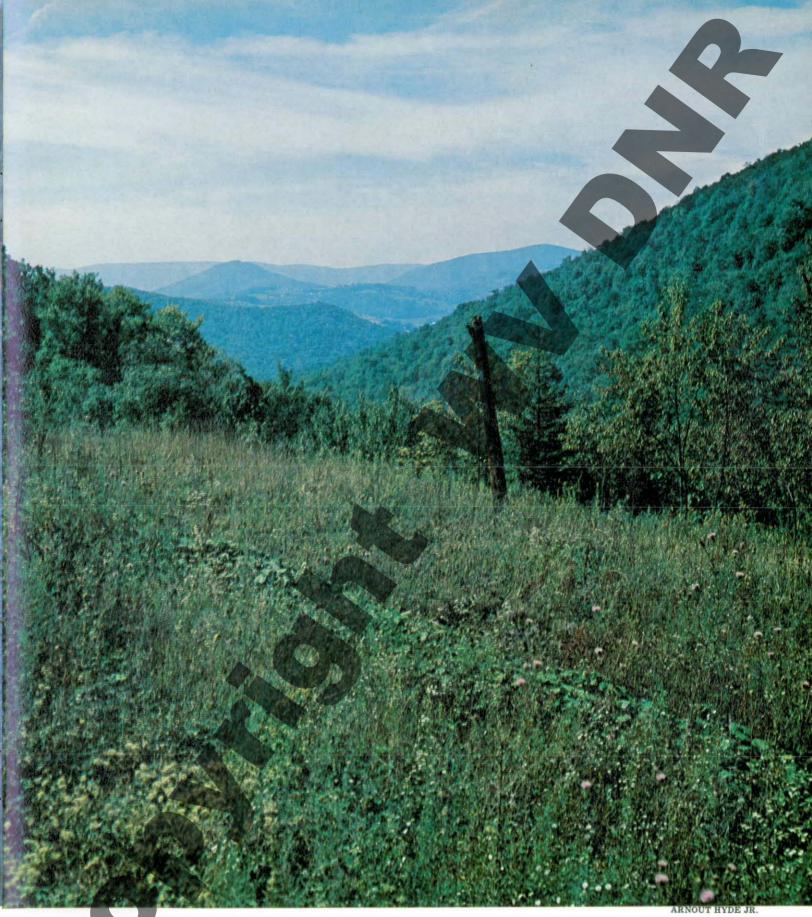
GONE

MAURICE BROOKS

their toes.

We were more surprised at their numbers than at their presence. We had seen them here before, and we knew that a small hotel in Franklin had nine mounted birds in its lobby, a common sight in hotels, post offices and public buildings in the area. All were golden eagles; there were no bald eagles among them.

This was forty years ago, the year 1930 to be exact, and I still have to re-read my notes from that day to believe it. In the past fifteen years I have seen not a single golden eagle in West Virginia. A few have been spotted in migration, but not one has come under my view, which to



Once a haunt for majestic eagles, this high-mountain region is in Pocahontas County near the old lumber town of Spruce. This area may be reached by the Cass Scenic Railroad.

my way of thinking is a burning shame.

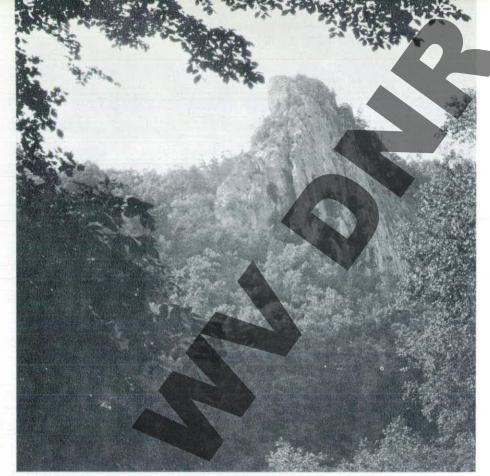
A lot of things happened to the golden eagles, all of them bad. Pendleton County and the surrounding areas were sheep country, and the local doctrine had it that golden eagles carried away lambs. They may have done so on rare occasions when they could find one sick or young enough. At any rate, the killing of every eagle became a matter of complete public approval, and the hunters were enthusiastic in the slaughter.

Most counties in the state then embarked on the notorious vermin extermination campaigns, from which the state's wildlife and game populations have never recovered. In counties where they occurred, golden eagles were high on the point list: a bird or two could make the difference between winning or missing a good rod and reel, a fine rifle or some other desirable prize. This pretty well wiped out the resident golden eagles, along with many hawks, owls, bald eagles and other useful and beautiful birds.

There were still a few migrant eagles coming through the state, but they too were soon eradicated. Sheepmens' associations hired skilled marksmen in light planes to cruise the wintering grounds and shoot every eagle in sight. It worked—today you have to search for golden eagles only in isolated mountains and high plains in the west.

Though there are hundreds of miles of possible breeding ledges in West Virginia—white Medina sandstone is conspicuous near the summit of almost every ridge in the North Fork Mountain area—to this day I don't know positively of a golden eagle's nest that was ever found in West Virginia or nearby Virginia.

The rumors were there in abundance, always circumstantial and always assured One time were ally thought we had one, a few miles south in an extension of North Fork Mountain in Highland County, Virginia. It didn't work out, but it was fun looking. My father tried writing to every postmaster in Pendleton and Highland, Vir-



Caudy's Castle, Hampshire County. Eagles liked to perch on high crags like this. W. Va. Geological Survey photo.

ginia Counties. Those who bothered to reply all knew of nests, always about ten miles away. This was the pattern and it never varied. So we still don't know positively that a baby golden eagle has been reared in historical times in West Virginia.

TO COMPLETE THE TALE of man's destruction, I should add that a few pairs of peregrines-we called them duck hawks in those days nested on some of North Pork's cliffs. Many of these fell victim to the falconers; these noble birds are almost priceless to the falconry enthusiast. Others were shot-"they were vermin weren't they?" In more recent years our zeal to kill everything in sight with DDT and its relatives has taken care of the peregrines. There is not known to be a single resident peregrine in the eastern United States.

Even without its great soaring birds, there are still large birds aloft at North Fork Mountain: ravens and vultures on every summer day, often coursing hawks of various kinds, and sometimes in migration large flights of broadwinged hawks, now our most abundant soaring species.

Yet my mind keeps returning to what might have been had the golden eagles not been destroyed. Outdoors people travel by hundreds to spots in the west where they have a chance to see one of these magnificent birds. They would come in greater numbers to Pendleton County, if only there were a reasonable prospect of success. These would be desirable visitors too-people who are expert photographers, who write books, newspaper and magazine articles, and who paint pictures. They could and would give this rewarding region the sort of publicity that is most helpful and most desirable.

There is no prospect, so far as I can tell, for the return of the eagles; they are gone for good, and in one human generation. It's too bad; a few of these noble birds would change West Virginia's image for hundreds of people.



MAKE YOUR OWN BACKYARD OR COMMUNITY BIRD SANCTUARY

"How do we make our community a bird sanctuary"? This question is asked often. It isn't a complicated matter. There are two types of bird sanctuaries. The first is for your garden or your own backyard. To maintain it the requirements are quite simple:

- Clean water available at all times for bathing, with a perch nearby.
- Food particularly in freezing weather, suitable feeding trays, grit when the ground is frozen or snow-covered.
- Nesting space trees, shrubs, vines or houses.
- Protection from enemies, as far as possible.

The second type of sanctuary is a municipal one. It may be a park, including roadside and mini-parks, rest areas or a large area with trees and shrubs. It must have water, food, nesting space and protection from enemies. You may make your community a bird sanctuary by preparing an ordinance, having it adopted by the city council, and declaring the community to be an official bird sanctuary. It is good to create public interest and support by securing endorsements of garden, womens clubs, PTA and other groups.

The following ordinance is an example and one that is suggested by the National

Audubon Society:

BE IT ORDAINED by the Mayor and Council of the City of Ripley, West Virginia, in Council assembled: That the entire area embraced with the corporate limits of the City of Ripley be, and the same is hereby designated as, a Bird Sanctuary.

That it shall be unlawful to trap, shoot, hunt or attempt to shoot or molest in any manner any bird or vild fowl or to rob bird nests or wildfowl nests. Provided, however, if starlings or similar birds are found to be congregating in such numbers in a particular locality that



they constitute a nuisance or menace to health or property in the opinion of the health authorities of the City of Ripley, then in such event such health authorities shall meet with the representatives of the Audubon Society, Bird Club, Garden Club or Humane Society, or as many of said clubs as are found to exist in the City of Ripley, after having given at least three days actual notice of the time and place of said meeting to the representatives of said clubs.

If as a result of said meeting no satisfactory alternative is found to abate such nuisance, then said birds may be destroyed in such numbers and in such manner as is deemed advisable by said health authorities under the supervision of the Chief of Police of the City of Ripley. Anyone violating the provisions of this Ordinance shall be punishable by a fine of not more than \$100 or imprisonment not exceeding 30 days.

This Ordinance shall take effect immediately upon its adoption.

Despite the protection our birds receive in this state, their value can be dramatized by securing the passage of a local ordinance that establishes the entire community as a bird or wildlife sanctuary. A great deal of desirable publicity will result from such a move. You may want to erect an attractive sign at the city limits bearing some such legend as:

RIPLEY IS A BIRD SANCTUARY HELP US PROTECT THEM

RIPLEY GARDEN CLUB

However, before constructing a sign, you should contact the local road department for permission to erect signs on their right-of-way. Bird Sanctuary signs are available from Fairchild Products Corp., 512-24th Street, West Palm Beach, Florida 33401. The cost is \$7.50 plus postage and handling. They come in green and white and weigh 4 1/2 lbs.

Remember that proclaiming your community as a Bird Sanctuary alone is not enough for the protection of our birds. You can, with a little planning, greatly increase the bird population in even a comparatively small area. Correctly built birdhouses can provide nesting sites for some of the cavity dwellers. Suitable planting will not only increase the supply of food and cover but add to the beauty of the landscape. Bird baths and fountains can provide water. Building a songbird sanctuary in your neighborhood can be made a fascinating project.

PLANTS FOR BIRDS—The surest way to have a population of birds living around your home is to grow trees and shrubs which provide them with nesting places and a supply of food. If you will begin your plantings now, in a few years you will be enjoying increased bird numbers every season. A suggested list of plants which are good for this use in West Virginia are: mountain ash, flowering dógwood, juniper, crabapple, honeysuckle, black haw, elderberry, sassafras, holly, persimmon, wild grape, blackberry, lespediza and wild black cherry.

Make and operate a winter feeding station, and you will soon be enjoying some of the best-loved members of nature's

family-the birds.



ROGER D. WOOD

State Department of Highways

"This highway which will traverse some of the most spectacular mountains of the East, will

This highway, which will neering firm employed to do detraverse some of the most spectacular mountains of the East, will highway through the Monongapen up vast new areas for rectation and which with the construction and which with the construction and the struction of great tourist attraction."

The observation was made a few years ago by a consulting engiwill neering firm employed to do de-

those who labored in its behalf for many years.

The consultant, in his recommendations to the State Department of Highways, was enthusiastic about the proposal for a 160mile highway from Richwood, Nicholas County, to Gormania,

The firm noted, "Some of the best hunting territories and the finest trout fishing streams in the eastern United States are to be found in the area traversed by this proposed highway, many of which are presently inaccessible. Many new areas will become available for the development of all season recreational facilities such as picnic and camping areas, scenic overlooks, ski, sled and toboggan slopes, aerial cableways and chalets. A better access to existing facilities will be provided.'

It had long been recognized that one of the major drawbacks of Monongahela National Forest was the lack of adequate highways. What was needed was a highway that would encourage motorists to visit the forest and to take advantage of its recreational assets and tourist attractions.

The attractions of the forest are many. Just a few that will be more accessible because of the Highland Scenic Highway include Summit Lake, Cranberry Glades, Williams River Public Hunting Area, Cass Scenic Railroad, Spruce Knob and Spruce Knob Lake, Seneca Rocks, Canaan Valley State Park and Blackwater Falls State Park.

The highway was authorized by Congress in passage of the Federal Highway Act of 1962. It is to be financed entirely by federal funds under the Public Lands Development Road Program, except for those portions which are outside the limits of the forest. These sections will receive 50 50 federal-state financing.

The highway is a joint venture of the West Virginia Department of Highways, the U.S. Bureau of Public Roads and the U.S. Forest Service. The highway department and the BPR coordinate design and construction while the forest service, which has overall jurisdiction over the forest, works with the highway agencies of design and location.

Since construction of the highway is dependent upon yearly appropriations by Congress, it will take some time to complete the project at the present rate of progress. The \$2.2 million appropriated for fiscal 1970 had been withheld by the BPR because of President Nixon's freeze on projects entirely financed by the federal government. However, the freeze was recently lifted and it is anticipated the \$2.2 million will be released later this year.

The first Highland Scenic Highway construction contract was awarded in 1965 and involved a 4.4 mile segment. That contract and one for 5.7 miles awarded in 1966 are completed, but the inadequacy of access roads to the completed portions has limited traffic on the new highway. However, completion is slated this fall on a 3.09 mile project, started in 1968, that will provide a 12 mile stretch with full access.

Because of the limitations caused by Congressional appropriations, priority has been given to the southern portion of the highway and the design work thus far has been confined to the area south of Cheat Bridge. As a result, the location of the highway north of Cheat Bridge has not been finally determined.

Untapped recreational areas will be accessible as a result of the Highland Scenic Highway. It is anticipated that additional facilities will be added white the highway is being constructed. For example, the Forest Service, in a study that led to Congress' original action on the highway, suggested 35 impoundment sites within the National Forest.

Since the highway will primarily be for those who want to visit the ferest, maximum protection to scenic beauty was incorporated into the design. There will be no deep cuts such as those found along West Virginia's Interstates, nor will there be any interference with natural features.

In some cases, in order to provide motorists with the maximum in scenic wonders, the highway will travel along the top of mountains. According to present plans, such vantage points will include Kennison and Gauley Mountains, both in the vicinity of 4,000 feet in elevation.

In location and design, particular attention is being given to insure the ultimate in benefit and protection of natural and cultural resources and to provide the best possible scenic values. Previously inaccessible hunting areas and some of the best trout fishing streams in West Virginia will be within five miles of the area.

In addition to serving the Spruce Knob-Seneca Rocks Recreation Areas, the Cass Scenic Railroad and other attractions, the highway will open previously inaccessible hardwood forests. It has been estimated that at least 270,000 acres of potential timber-producing land are within Monongahela National Forest near the proposed location of the highway.

No story about this highway would be complete without recognition of the many individuals and organizations which over a period of years labored in behalf of a scenic mountain road through the heart of the Monongahela National Forest. These persons and the governmental agencies involved in design and construction of the highway look forward to the day when motorists can travel the entire length of the forest.

Just recently, Commissioner of Highways William S. Ritchie Jr. had this to say about this project:

"The impact of the highway on the economy of the area is incalculable as it will be a great tourist attraction and will open up vast new areas for recreation, sight-seeing, fishing and hunting. Also, as the Monongahela National Forest is under a multiple use program, the highway will serve to tap extensive hardwood forests and provide access for the development of the many renewable natural resources such as water, wildlife and timber."

Virginia has its Skyline Drive, North Carolina its Blue Ridge Parkway and now West Virginia its Highland Scenic Highway.

Fish, being cold-blooded, are incapable of transmitting heat to their eggs. Incubation comes from the sun.

Birds need not worry about the toxic and acrid qualities of some wild plants. They can eat the berries of poison ivy, poison sumac and the deadly nightshade without ill effects.

YOU HEAR IT . . . faint at first, like the chorus of a far-off pack of hounds. Louder now, wild and free . . . the haunting greeting of the first flock coming north. Canada geese, scribing a path across the pale March moon.

The clamorous honking reaches a high point, then subsides quickly as the warm wind pushes geese and noise from your senses, leaving you with a curious longing, as for a lost love.

You are like a clumsy stone, destined to use the crutches of machinery to span distances, while they need only leap into the air and follow the irresistible urge that draws them unquestioned toward the tundras and potholes to the north.

Migration. The promise of rebirth for millions of birds that twice a year stream across the North American continent.

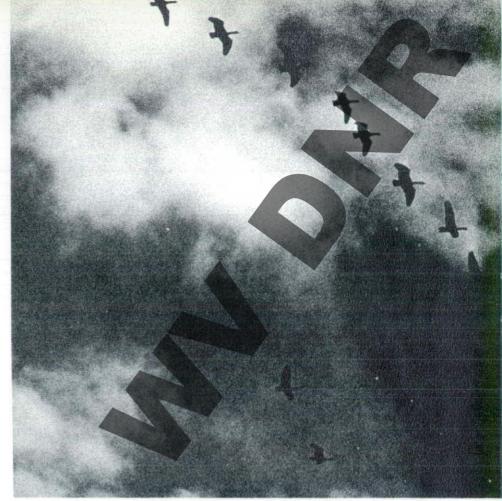
But why do they do it . . . embark on that dangerous journey over the plains and mountains and along the ancestral water routes? Why not stay where the climate is mild and food abundant?

Curious minds since Aristotle have observed the migration of birds and sought to figure out the reason for this curious seasonal activity. Some of the theories, especially on the subject of whether or not birds actually did migrate, were imaginative to say the least!

Man observed that certain frogs, toads and other creatures burrowed into the bottom mud of ponds to spend the winter, and some were convinced that birds did the same thing.

Finally, about the time that John James Audubon was conducting his studies on the birds of North America, the migration theory came to be universally accepted. Emphasis then shifted to the "why," "how" and "where" of migration.

The practice of banding birds was undoubtedly one of the most direct methods of proving migration. Audubon was probably the first in the New World to band birds in such a way that they could be recognized in-



THE MYSTERY OF M

Reprinted from OUTDOOR OKLAHOMA

dividually, and the first truly scientific banding in America is attributed to P. Bartsch, who worked with black-crowned night herons in 1902.

It wasn't long before modern banding techniques were employed all over the world and increasing amounts of data on migration were recorded.

It was found that most North American birds travel along a north-south axis, and furthermore, that this is mainly a phenomenon of the northern hemisphere. Further study concluded that only about 15 percent of the world's birds indulge in the north-south movement, that which we commonly term "migration."

In North America, the main migration lanes have been divided into four routes, primarily for waterfowl management purposes. These are the Pacific, Central, Mississippi and Atlantic flyways. The most important is the Mississippi, since it involves the greatest number of migrants.

The use of a particular flyway by populations or races of a species, sometimes by an entire species, is hereditary. If trapped in one route and moved to an entirely different one, some birds will return to the original flyway before continuing migration.

Others may migrate by leaving the new location in a direction exactly parallel to that which they would have followed in the old flyway, regardless of whether this leads them to a favorable breeding or wintering area.

The southward flight in the fall is most often a leisurely journey

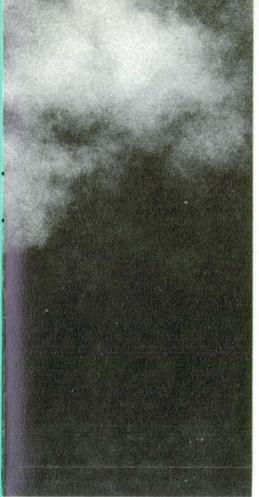


PHOTO BY DEAN G. GRAHAM

IGRATION

made up of resting and feeding stopovers alternating with flying. The spring trip tends to be faster.

Small birds can and have traveled from 100 to 200 miles in a day, but as a rule they do not cover more than 50 or 60 miles. Larger birds average slightly longer distances.

The hazards of migration generally stem from weather, especially for the smaller birds. Storms probably do more damage to these small ravelers than anything else, but the destruction of migratory birds due to their striking lighthouses, light-ships, tall bridge piers, monuments, wires and other mannade obstructions has been tremendous.

Especially in the East, where migration takes place in dramatic waves, coastal light houses with

fixed beams of bright, white light are death traps in foggy weather.

Land birds migrating for long distances over water have run into violent storms and have been forced by the thousands into the sea, tired and tatter-winged, just a few miles short of their destination.

Imagine what the Arctic tern must experience on his trip from the coast lines of Labrador and Greenland to the Antarctic. This bird, undertaking the longest journey of all migrants, flies 11,000 miles twice a year!

How do they navigate?

Experiments by one Gustav Kramer of Germany, using starlings as subjects, indicated that these birds use the position of the sun combined with an awareness of the time of day to get a "position fix." On heavy overcast days the birds became confused.

Some species, including waterfowl, migrate at night. Experiments have shown that the stars are an aid in orienting these birds, evidence that man was not the first creature to use stellar navigation.

The "where" and "how" of migration have been thoroughly investigated by researchers over the ages, and many of their findings are pretty well agreed upon new. But the "why" of migration has not been absolutely pinpointed to everyone's satisfaction.

William Rowan, conducting experiments on slate-colored juncos in 1925, found that the change in the length of daylight, controlled to correspond exactly with migration time in spring, triggered migration through sexual stimulus. This in effect readied the birds for the long trip physically.

A drastic reduction in food supply or a sudden change in weather will help push birds on their way, but only if it coincides with the migration urge.

This is about all that researchers can agree on: That food supply coupled with the innate urge to migrate during the breeding cycle (conditioned by length of day) is the magic of migration.

The rate of change in the length of days in fall triggers more chemistry inside birds prone to migrate. They get restless. This helps explain why many birds leave the breeding grounds long before winter comes and when food supplies are still plentiful

That question, "Why do the birds go back north to breed?" has been asked by many inquiring into migration. At first glance, it seems logical that they would stay south where climate is temperate or subtropical and food is plentiful.

The return to the north is not only instinctive. It many cases, it is logical, when we pause to consider the long summer days, rich insect life, relatively few predators and availability of nesting territory the region offers. These offset the hazards of migration and of wintering in distant areas.

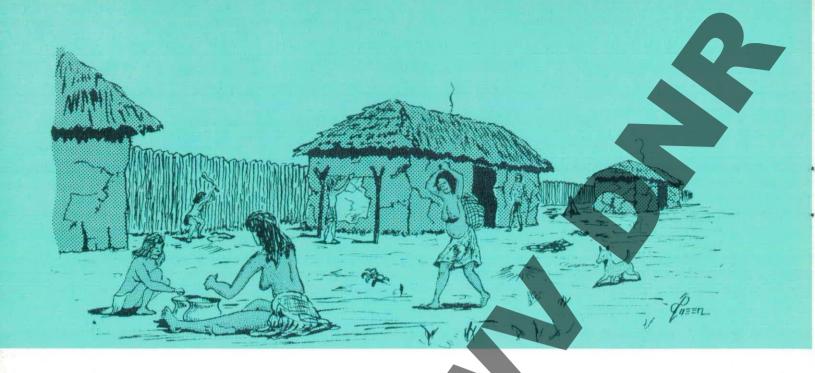
If migrants stayed south, they would be competing with resident species for food and territory during the nesting and rearing period.

Inquiries into the subject of migration will go on until man is fully satisfied that he knows all there is to know... and that will never happen. Nature will always be there to tilt the soundest theory a bit, and provide the exception.

And that is as it should be, for it is the mystery that keeps inquiring minds active . . . and perhaps it is more rewarding simply to note the wonders of migration than to try to explain in a text the exact "why" of it, though the latter activity may advance our knowledge.

One who noted the migration of birds and paused to comment on a species was Aldo Leopold. There could be no better closing to this hasty treatment of the subject than a few of his lines:

"One swallow does not make a summer, but one skein of geese cleaving the murk of a March thaw, is the spring. A cardinal, whistling spring to a thaw but later finding himself mistaken, can retrieve his error by resuming his winter silence. A chipmunk, emerging for a sunbath, but finding a blizzard, has only to go back to bed. But a migrating goose, staking two hundred miles of black night on the chance of finding a hole in the lake, has no easy chance for retreat. His arrival carries with it the conviction of a prophet who has burned his bridges."



A FORT ANCIENT SQUAW'S LIFE

BETTYE J. BROYLES

Archeologist

West Virginia Geological and Economic Survey

A first-person account by a typical squaw of Indian life in her village on the Kanawha River near Buffale, Putnam County, West Virginia. She lived during the late prehistoric or Fort Ancient period, 1600-1700. Her story is based on assumptions from artifacts, posmolds and other evidence uncovered during excavation of the site from 1963 to 1965 by Dr. Edward V. McMichael, former staff archeologist with the survey.

THE LARGE VILLAGE where I live is on the banks of the Great River flowing past it from the south.

Our village is surrounded by a high oval wall and is in an ideal spot because it is so close to the river with its abundant supply of fish and mussels, and because of the rich soil of the nearby fields in which we plant our crops.

Life is never dull and there is always something to keep us busy. We women spend much of our time in the fields during the warmer months, and occupy ourselves with weaving, pottery making and other household chores when not tending our crops and our children. The entire village joins in harvesting crops and building important structures. Games, social gatherings and ceremonial feasts and dances take place in our public plaza.

Because our village is sometimes attacked by warriors from other villages and tribes, it is guarded by a double row of tall posts set close together in the ground, with entrances so narrow only one person can pass at a time. These openings can easily be blocked for defense in case of attack. Because raids by groups from the north are becoming more frequent lately, to get away from them we may have to abandon our village and move westward to join other friendly tribes for mutual defense.

Meanwhile, all of our villagers helped to build the wall, the men doing the heavy work of cutting and setting the logs up on end, and the women helping with the lighter work of packing soil against the base of the posts to keep them in place. New posts have to be added from time to time, but otherwise the wall is of sturdy construction capable of protecting our village. The base of the wall also serves as a refuse dump for the entire village.

All of the houses in our village are placed in two rows inside the great wall. In the center of the village is an open plaza that is always kept clean. Large ceremonial buildings are on opposite sides of this area. For relaxation, the villagers gather in the public square to socialize after our work is done.

The boys and men know many games to play which are enter-



Quiet cove on Sutton Lake is happy haven for anglers.

taining and make us laugh. Sometimes music is played on a flute made from the wing bone of a large bird. It is difficult to play and only a few of our men have learned how. Rattles are made from two turtle shells fastened together and filled with small pebbles, and grooved elk ribs are scraped to make a rasping sound. When they are all played together, it is a beautiful sound to us and makes us want to sing and dance.

The men gather around the plaza or in one of the ceremonial buildings to smoke their stone pipes. A special plant with large leaves is grown in the gardens

to use in the pipes.

The more important and secret ceremonial activities are carried on in one of the larger buildings with a medicine man chanting and leading the ceremonies. I cannot say exactly what type of ceremonies take place inside these buildings as the common villagers, particularly the women and children, are not allowed to participate in them. All the important decisions that involve the village are made at these meetings by a council composed of the elders of the village.

On public ceremonial occasions we dress in our best garments and wear our most elaborate ornaments. A large variety of necklaces are worn by both men and women. Beads are made of shell and bone, and are used in combination with a number of pendants made of cannel coal, stone, animal teeth, bone or shell. A few women wear bone combs in their hair and bone pins in both ear lobes. Many of the shells used for our ornaments were obtained by trade with other tribes from a great distance and are much prized by our villagers. Mussel shells gathered from the river are also used for the ornaments, especially small beads.

THE HOUSE in which my mate and I live was built last year. Much work goes into construction of a house, logs of various sizes must be cut for the walls plus two large center posts to support the ratters, holes must be dug to set the logs upright, bark

to cover the outside walls must be stripped from trees and grass has to be gathered for the roof covering. Our house is about 18 feet wide and 30 feet long.

Because we do most of our work out-of-doors, there is no need for windows, so only one opening is left for a door on the side of the house facing the center of the village. A smoke escape hole is also left in the center of the roof directly over the fireplace. Otherwise the house would fill with smoke and our eyes with tears when we cook indoors during bad weather.

Our fireplace is in the middle of the room and I took great care in making it for I wanted it to last a long time. First I scooped out a basin-shaped hole in the floor, then I mixed clay with water and kneeded it until it was very smooth. I then lined the hole with the clay. After my fireplace has been used for awhile, the heat bakes the clay lining making it very hard and durable. If the sides break, I rebuild them with more clay.

The inside of my house is simple and contains little furniture. Several small poles are sunk in the dirt floor to serve as frames for benches that are against the wall. These frames are then covered with cane, grass and skins. In the daytime, we use them as seats, and at night we sleep on them.

We spend a lot of time working in the fields outside the great wall. In spring we plant a number of vegetables including corn, bears and squash. We loosen the ground with a hoe made of a targe mussel shell attached to the end of a stick. Before time for the crops to be harvested, we dig

PRESERVATION of the forest is not a new idea. In classical times the wood nymphs were thought to perish with the trees which had been their abode. It was therefore an impious act wantonly to destroy a tree.

As early as the 13th century forest conservation formed a definite part of public policy in Europe, and at the time the Spaniards conquered Mexico they found that the native peoples had severe penalties against the destruction of trees.

storage pits throughout the village. Sometimes we construct cribs near our houses to serve as storage bins, too.

Other foods are used to supplement the crops grown in the fields. Wild grapes and several kinds of berries are gathered nearby, and nuts are gathered from trees growing in the lorests surrounding our village.

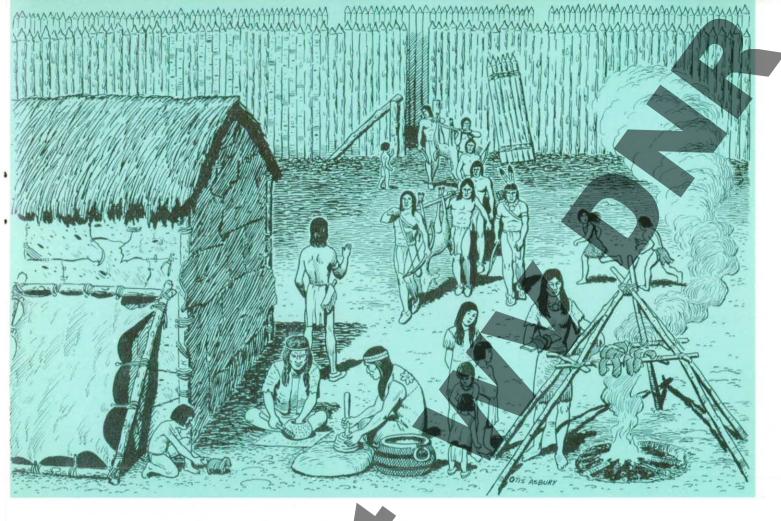
Our men sometimes place traps and nets in the river to catch fish, but usually they fish with a hook curved from bone plus a line. Mussels are gathered in shoals of the river and turtle meat is also an important and tasty part of our diet.

WHZN OUR MEN are not working around the village or fishing, they are preparing for hunting trips. They must fashion arrow points, knives, scrapers and celts out of flint, and this is a time-consuming job. Killing wild animals is not easy and the arrowheads and shafts must be made very carefully so they will shoot straight and hit their mark. Otherwise, we would starve.

When the men are ready, they leave the village to roam the forests and nearby hills in search of a large variety of birds and animals, especially deer which is our main source of meat plus elk and some bear.

Upon return of our men from the hunt, we women take over the final preparation of the meat and hides. Much of the meat we dry and store for the long winter months when crops cannot be grown and when game is scarce. We hang a lot of our food from the rafters to keep dogs, mice and insects from getting to it.

On his last hunting party, my mate killed a large buck, the hide of which I have stretched on poles outside our house. When the hide has dried thoroughly, I will pound and rub it until it is soft. From skins like this I fashion garments to wear during winter when it becomes too cold for the fabric clothes we wear in summer. The soft hides as well as woven fabrics are usually sewed together with a needle made of bone, but sometimes it is necessary to punch holes in the hides with a bone awl



and then lace them together with narrow strips cut from the hides.

Much of my time is spent cooking, weaving cloth for clothes or other articles and making pottery. I can remember when I was a young girl just learning to make pottery. I thought I would never be able to master the art of winding one coil of clay on top of another, keeping the pot round, and at the same time making it sturdy enough to use, but I found it just takes practice.

POTTERY VESSELS I make are varied in size and shape, depending on the use I will have for them. Many of the larger vessels have handles or lugs near the rim so that they can be suspended from poles over the fire Large and small shallow bowls are also useful for cooking and serving food. Wider shallow bowls I sometimes use to boil down water from nearly springs for its salt.

nearby springs for its salt.

The surface of my pottery is left plain or is sometimes covered with sord impressions made by

paddling the surface with a small flat piece of wood wrapped with strands of cord. Pieces of fabric or net are also sometimes wrapped around the paddles. This not only gives my pottery a pleasing texture, it also keeps the vessel from slipping out of my hands when it is well.

The clay I use for making pottery is found near our village. After kneeding the wet clay, I mix it with ground mussel shells to give it more strength. Even so, no matter how carefully I make these vessels, they are easily broken and soon have to be replaced.

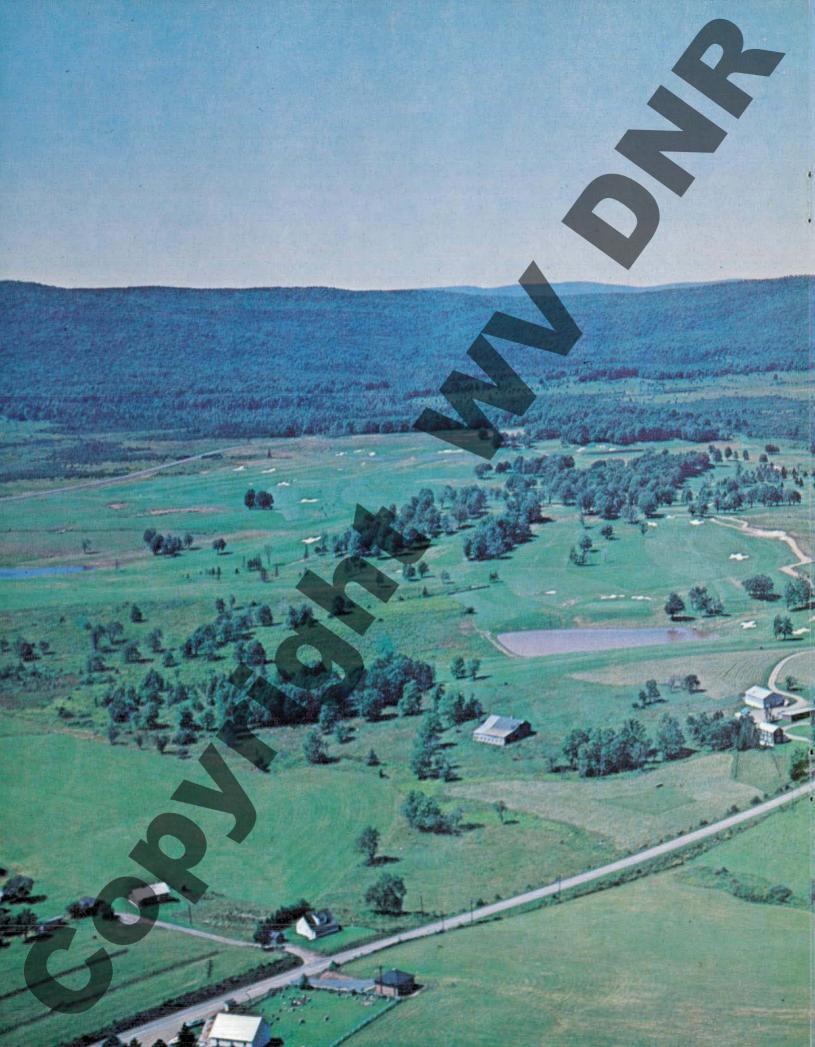
OUR VILLAGE has no special burial place and we do not construct mounds of earth to cover the dead as some of our ancestors did. The bodies of our dead are buried anywhere that is convenient and to keep them near us, either in pits dug in the village or inside the house. Many house walls are lined with trenches containing a large number of remains

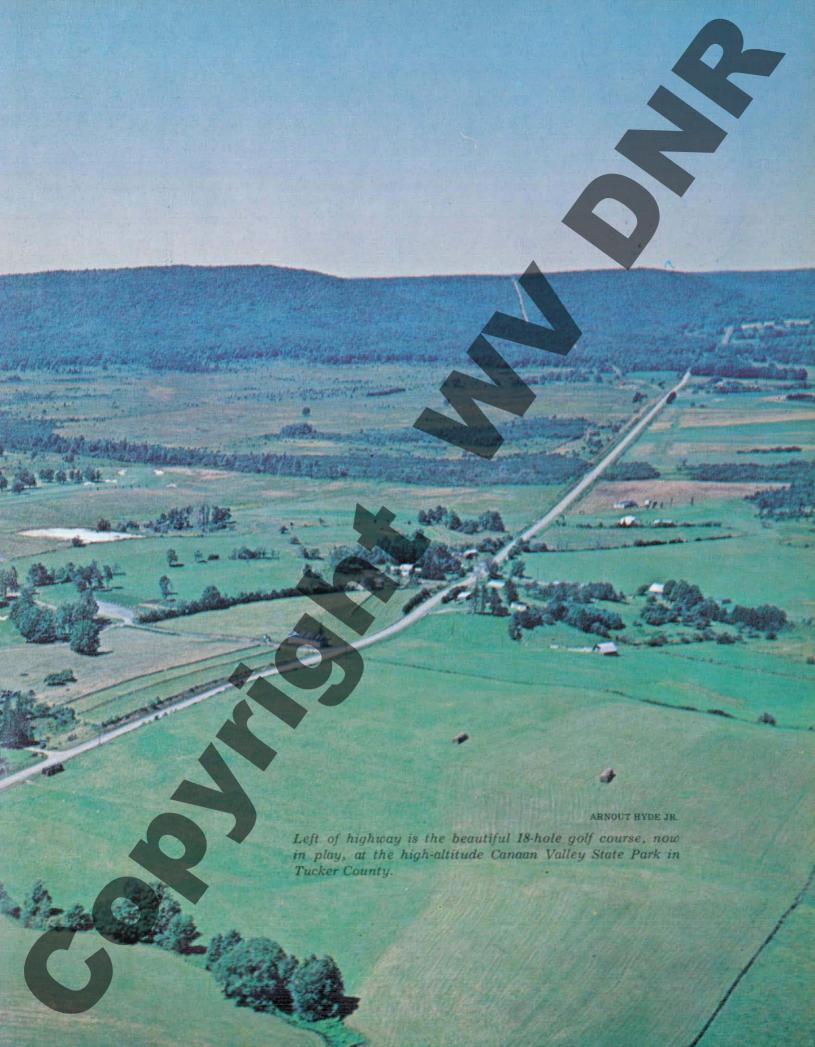
buried over many years. It is not easy to tell where the older burials are located and sometimes these are disturbed by more recent burials.

We sometimes include pottery vessels with food for our deceased, though more important personages such as our medicine men are buried with more valuable grave offerings such as gorgets, beads and other ornaments. In our grief, we often bury beads with our young to pacify their spirits.

I do not expect to be around for a long time for our people do not live to a very old age, the oldest being an average of about 30 years with more than half being 21 or younger. Many infants die during their first years, so the population varies little and there are usually about a thousand of us living in the village.

When I die, I hope to be buried in our village by the banks of the Great River, where the breeze is always blowing and people will always be passing by so I won't be alone.







SMOKE HOLE COUNTRY

J. LAWRENCE SMITH

THE POTOMAC RIVER'S South Branch begins its boisterous plunge into Smoke Hole country just north of the little Pendleton County community of Upper Tract, West Virginia.

The stream has flowed rather peacefully through upper reaches of the South Branch Valley, but its mood suddenly changes when it feels the squeeze of the narrow canyon. It rushes and roars in defiance to steep mountain walls that hold it in its course. Miles down river, where it escapes the press of the mountains, it becomes quiet again as it wanders through a wide valley.

Smoke Hole, a canyon the river has cut from Upper Tract to near Petersburg in neighboring Grant County, has long been an attraction for people interested in a wide variety of purpoits.

wide variety of pursuits
Legend has it that Indians smoked deer meat in a cave here and early settlers were supposed to have used the caves for similar purposes. Smoke that rose from the caves and up the canyon walls may have given the area the name it now bears. Another explanation is that mist which forms when moist air rising from the caves meets the cool air outside giving the appearance of smoke.

While Indians and settlers may

While Indians and settlers may have found the caves a convenient place to smoke meat, in more recent years remote reaches of Smoke Hole gave the moonshiner a handy hideout to ply his illicit trade. Revenuers sought out tell-tale columns of smoke that might lead them to a mountaineer who was turning out liquor during prohibition days.

Not too many years ago, only the very adventuresome could tramp into the depths of Smoke Hole due to its inaccessibility. With reluctance, mountain folk dwelling there submitted to influences of the world beyond their rugged horizon. Outsiders who invaded their mountain stronghold were regarded with suspicion.

One woman lived to a ripe old age and rarely traveled beyond sight of the cabin where she was born. She lived her days free of the tomfoolery of the outside world. Many might not readily admit it, but they are envious of a life liberated from the press of our complex and often-confusing civilization.

INDIANS ARE NOW GONE and the passage of time has brought many changes to Smoke Hole country. The attraction now for the area is for visitors with such wide-ranging interests as canoeing, camping, caving, fishing, botany and bird study.

Smoke Hole was an angler's paradise long before botanical in-

terests, spelunking and other endeavors attracted visitors. For the fisherman who had the means and the time to make a trip into this secluded country in years gone by, the reward was usually a string of trout as fine as he had ever caught in his wildest dreams. Only an intimate circle of friends and ardent disciples of Izaak Walton knew where to dip their lines for a try at the big ones.

Smoke Hole is a lesson in geology with the words being spelled out in bold letters. A short distance north down the canyon from Upper Tract, the steeply-tilted strata of Eagle Rock is a vivid illustration of convulsive movements of the earth's crust which created the grandeur of surrounding mountains.

Eagle Rock was not named for the bird even though eagles once soared over the rock and may have built their nests there. The spectacular formation is named for William Eagle, a veteran of the Revolutionary War. Young Eagle enlisted in the cause of freedom at the age of 15. Not only facing the rigors of battle, he also had to bear the ordeal of the harsh winter at Valley Forge. With freedom won, he eventually settled at Smoke Hole where he died in 1848 and is buried near the cliff that bears his name.

The area offers a number of con-

ditions that make it a living lab-

oratory for botanists.

A wide variety of wildflowers are found in Smoke Hole as spring gets under way. Hepatica will bloom with its flowers nodding in the slightest breeze. Bloodroot and spring beauty will be found at numerous places. Dutchman's breeches look like the clothes line of Tom Thumb. It is easy to overlook the bloom of wild ginger it is so low on the ground and often hidden. Other flowers will begin bringing color to the forest floor where leaves have lain brown and enriching the soil through the winter.

Redbud will paint the slopes with shades of pink. The bright orange of flame azalea will seem to burn among the greenery of late spring. These related shrubs of the heath family, some with fragrant pink and rose blossoms, are called honeysuckles by moun-

tain folk.

AS SPRING TURNS TO SUM-MER, showy orchis with its purple and white blossoms and large pad-like leaves will be in bloom in the woods near the Smoke Hole picnic area. Later in summer, cardinal flower with its bright red blossoms will be outstanding where it grows on banks of the river. With luck and endurance, one floral treasure can be found on steep slopes where it grows and blooms during July and August. It is the crested coralroot, an orchid with bronze flowers and purple stripes. The plant approaches its northernmost known limit in North America on a steep, rugged slope in the Pendleton portion of Smoke Hole.

The road continuing down river from the Smoke Hole Recreation Area leads to the Big Bend camping area where the river makes a large loop in its course. It almost seems that the river tires of its rush through the canyon and meanders long enough to create the horseshoe. The same road also leads to one spectacular rock formation, a wall called blue Rock.

formation, a wall called blue Rock.

A challenge for spolunkers is
Peacock Cave in the portion of
Smoke Hole claimed by Grant
County. The cave has various pas-

sageways and rooms, but lacks any spectacular limestone formations. It was designated in honor of a man by the name of Peacock who mined saltpeter here prior to the War of 1812. Another in the same county is Smoke Hole Caverns, open to the public.

Caves are also to be found at the base of sheer cliffs back at Cave Mountain above Eagle Rock. A trail leads to the caves but it is a hike of about two miles, uphill all the way. Along the trail are impressively large yellow poplars, beech and sugar maple. Beneath a cluster of large hemlocks there is a moldering trunk about five feet in diameter, mute remnant of a forest giant that had gotten the ax many years ago.

One large cave here was mixed as a source of saltpeter for the manufacture of gunpowder by Confederates during early years of the Civil War. Large iron kettles were set up along the river for use in extracting niter from the cave deposits. The operation was later captured by Union Soldiers.



Picturesque South Branch of the Potomac in the Smoke Hole is fine fishing stream.

CAVE MOUNTAIN is honeycombed by many passages. It is reported that sawdust thrown into an underground stream there will



Smoke Hole is threaded with magnificent scenery.

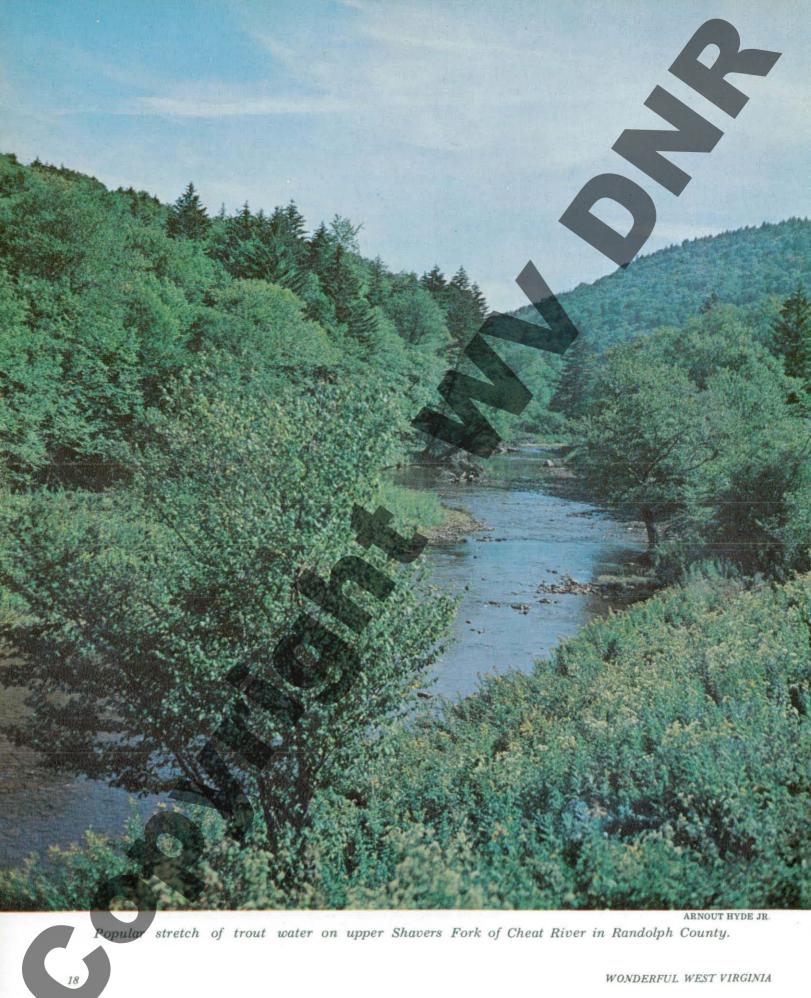
emerge at Indian House Cave on the river eight miles to the north.

The Smoke Hole picnic area is an inviting place to eat and relax while exploring nooks and crannies of the canyon. One evening in June, a cardinal and catbird were voicing their familiar refrains. Several redstarts in sycamores along the river were singing their songs that begin with rather clear notes, but end in a buzz. The flash of orange on wings and tail of one of these birds was seen while it was obliging enough to fly into a tree overhead. From along the river came the song of a water thrush and the rattle of a kingfisher.

The abrupt call of the little Acadian flycatcher sounded farther up the slope. From brush nearby came the galloping song of a Kentucky warbler and high in a tree a hooded warbler was singing its cheery song. There seemed to be no absence of warblers including the parula and worm-eating species rarer at this altitude. The songs of both can only be described as buzzes, but variation in the buzzes is the key to their identification. Melodious notes of a wood thrush drifted through the

forest.

The main road forks at a country



store, and taking the left turn leads out Forest Service Route 79 up the slope to the fire tower on High Knob at an elevation of 3795 feet. At this higher elevation, the forest takes on a different character with chestnut oak becoming common. The little scrub oak with its glossy, almost hollylike leaves will be found in the understory with mountain laurel and bracken also present. Familiar leaves can be seen on spindly sprouts which are mute reminders of the once-towering native chestnuts that cloaked these slopes before being destroyed by blight.

A STIRRING VIEW awaits one from the heights of the fire tower. While studying details on the horizon, the croak of a raven may be heard as the large black bird comes into view soaring on air currents. The sharp backbone of the mountain trails away towards the north. Clusters of spruce are scattered across Roaring Plains to the northwest. To the northeast, the historic town of Moorefield is nestled in the valley floor. Mountain ridges to the east rise and fall towards Virginia.

From the tower on High Knob one can watch the changing scene as day fades into darkness. As shadows of evening creep up the slopes, the mountains turn to various shades of blue and purple. Shades deepen until the curtain of darkness has fallen completely and all is still and quiet atop the mountain. One may linger a while to enjoy the peacefulness before beginning the drive back down the mountain.

As thoughts drift back over the experiences of the day, the visitor may think of how Smoke Role is a place of many contrasts. It is a capsulized version of the grandeur and diversity of the geology and rich variety of plant and animal life found in this region of Appa-

It is a haven from the hustle of a world that shows no sign of lessening its tempo—a quiet place to ponder, a place to fish in peace, a place to nike. Smoke Hole country is many things to many people. It must remain so for many generations to come.

THE DECADE OF CONSERVAT

CHARLES DICKEY

The Seventies will be the decade of conservation. City people are finding out

that the wise use of natural resources is imperative for survival.

General magazines, the television networks and civic organizations have suddenly discovered conservation. There is no doubt that 1970 will be the year of conservation acceptance by the public, in theory if not in action

Hunters and fishermen should welcome newcomers to the fold. The news media, public and elected officials are picking up a crusade outdoorsmen started 70 years

Hunters and fishermen were the first to descry the destruction of America's forests, soils, streams, prairies and wetlands. They were the first because their love of the outdoors had made them aware of the heauty of nature and the necessity of the outdoors had made them aware of the heauty of nature and the necessity for protecting wildlife habitat and scenic grandeurs. Outdoorsmen were the first to plead for conservation because they were the ones who were hiking the mountains and fishing the streams. They saw what was happening, but the city folk did not. For over 50 years, the outdoorsman was the only one who really cared.

Hunters and fishermen were the ones behind major conservation legislation in state capitols and Washington. When they could not get space in the news media, they started their own publications to warn Americans of what was happening to

the environment.

Hunters and fishermen started state fish and game agencies. They asked that they themselves be required to buy licenses and that the money support the state agencies. Even today, with two minor exceptions, hunters and fishermen are the sole support of state fish and wildlife agencies; no money comes from the public despite the fact that the sportsmen funds provide protection and habitat for hundreds of species of non-game wildlife.

Hunters and fishermen, unique in all America, asked that their fishing reels, guns and ammunition be taxed so that funds could be increased for habitat development and the purchase of lands to be held in perpetuity for all Americans.

Hunters and fishermen imposed seasons and bag limits on themselves in order to give all a fair chance to crop game and fish without hurting the basic breeding stock of each species. The outdoorsmen formed national organizations to push for the wise use of our natural resources, such as the National Wildlife Federation, the Izaak Walton Deague of America, Ducks Unlimited and many others.

Now, after 70 years, who is going to be passed over and not given credit in this "Year of Conservation" by most of the mass media? You guessed it—the hunter and fisherman!

In fact, with the sudden rash of amateur preservationists, there is a good chance

that the hunter will be the first attacked. These sudden discoverers will think that game can be stockpiled; they don't understand that hunters crop only the annual surplus and that no game species in America is in danger of being overharvested y sportsmen.

It's up to every outdoorsman and the outdoor writers to see that hunters and fishermen are recognized for their leadership and magnificent crusades of the past seven decades. As for the host of newcomers to conservation, sportsmen should say, "Welcome aboard." All Americans are needed in the fight to use our natural resources wisely.

LETTERS

I have often wanted to tell you how much I enjoy getting WONDERFUL WEST VIRGINIA. Of all the magazines I receive in my library here at the Survey, yours is the one I look forward to each month. The pictures as well as the text point out how fortunate we West Virginians really are. The magazine also shows how much work and effort go into this publication.

> Ruth I. Hayhurst Librarian-Editor, W. Va. Geological & Economic Survey, Morgantown

Although a native of Akron, Ohio, I have subscribed now for nearly four years to WONDERFUL WEST VIR-GINIA and am deeply impressed by the inspiring natural beauty of your state. Past copies of the magazine are grudgingly placed in my waiting room after I read them and shortly thereafter usually vanish—probably in the hands of many former West Virginians who are now my patients.

> Earl W. Wharton, M.D. Akron, Ohio

FRENCH CREEK **GAME FARM INVITES YOU!**

Especially popular with family groups, the French Creek Game Farm in Upshur County is one of the most heavily-visited attractions in West Virginia.

There are a large variety of ani-

mals and birds, both representative of the Mountain State and the world.

By a recent act of the Legislature, this popular facility is now supported entirely by revenue from the state general fund, not by hunting and fishing license funds as in the past.

All attractions are free to the public. Only a few of the many zoo attractions are shown on these pages. Make it a must to visit French Creek Game Farm this

summer.



norned owl. Photo by Leonard Lee Rue III.



Why don't you come up and see me sometime?" (Gus), 500-pound African lion. Bob Combs Photo.



Buck deer.



"Lonely me, I miss kids more'n anybody." Black bear, the State Animal.



Playful otter.



"I scream for visitors!" Bobcat.



Raccoon.

estive...WEST VIRGINIA

BARBARA McCALLUM

Department of Commerce



the State Animal, at the first hint of warm weather

West Virginia begins throwing off its winter lethargy and moves into an exciting schedule of outdoor activities.

Among the first harbingers of spring are the apple and peach blossoms bursting forth in the state's Eastern Panhandle region. Through May visitors may drive for miles along roads lined with fragrant pink and white blossoms.

Farther west the more mountainous areas of West Virginia are gaily painted with flowering redbud, dogwood, service and wild cherry that brighten the dense woodlands.

For the vacationer who thrives on brisk mornings and evenings interspersed with warm sunny days, now is the time for a visit to one of West Virginia's parks or forests.

While serious anglers take to the streams for trout, bass, erappie, bluegill, muskellunge and walleye, West Virginia's many wooded sanctuaries becken hikers, campers and naturalists to enjoy the fresh green beauty.

When the mountains begin taking on their summer mante, West Virginians know it's testival time. Perhaps, the very fact that the state's ploneers settled a land in which even the Indians found year round residence rugged, gave them a love and need for diversion.

The first fair in what is now West Virginia was held at Mecklenburg (Shepherdstown) in 1766. Today, almost every community, township and county has at least one annual fair or festival, complete with a parade, barbeque, perhaps a jousting tournament or antique auction. These fairs and festivals offer unlimited opportunities for fun-filled days throughout West Virginia.



- Rhododendron State Outdoor Arts and Crafts Festival, Charleston, Kanawha County.
- 2. West Virginia Strawberry Festival, Buckhannon, Upshur County
- 3. West Virginia State Folk Festival, Glenville, Gilmer County
- 4. Braxton County Regatta, Sutton Lake, Braxton County
- 5. Stock Outboard Marathon National Races, Bluestone Lake, Summers County
- 6. Pocohontas County Pioneer Days, Marlinton, Pocahontas County

Even serious art takes on a festive flavor when exhibited out-of-doors such as during the fourth annual Rhododendron State Out-door Art and Crafts Festival to be held May 24 in Charleston.

The impressive state capitol, considered one of the most beautiful in the nation, presents an attractive backdrop for displays by many of West Virginia's finest artists.

Approximately \$1,200 in prizes will be awarded to participants in this year's show with the theme being "West Virginia's Man or Woman of the Year in Arts."

A poet in praise of the strawberry once said, "Doubtless, God could have made a better berry, but doubtless, He never did." Central West Virginians feel the same way, so they show their admiration at the annual Strawberry Festival to be held this year June 4-7 in Buckhannon.

The crowning of a king and queen are just part of the colorful highlights of the festival. Other events include chicken barbeques, an old-fashioned square dance, parade and strawberry auction.

The sound of old-time fiddlin' and banjo pickin' will resound through the peaceful town of Glenville, June 18-21 during the 21st West Virginia State Folk Festival.

This annual event is devoted to the preservation of traditional folkways of Appalachian culture. It includes a horse traders' reunion, spelling bee, parade of horses and antique cars, muzzle-



Early May blossoms complement the artistry of handcrafted baskets. Gerald Ratliff photo.



Hydroplanes roar over starting line at Bluestone Lake. Steve Meadows photo.



Medieval sport of jousting is an exciting addition to many West Virginia festivals. William Kuydendall.



Crowds throng artists' exhibits at State Capitol. Dave Cruise.

loading rifle shooting contest, along with the banjo and fiddle contests. Featured in the country store are old-time goods and antiques on exhibit and for sale as well as many traditional arts and crafts.

West Virginia, becoming well known for its white-water sports has several events that offer chills and spills for the aduatic sportsman. As a testimony to this fact are two July activities: the Braxton County Regatta, July 19 21 at Sutton Lake and on the same dates at Hinton, the Stock Outboard Marathon National Races will be held on Bluestone Lake.

Festivities during the Braxton County Regarda include an ox roast, square dance, coronation of Queen Aqua II, a bathing beauty contest for "Miss Water Nymph," aqua parade and ski show by the Art Claxion Ski Troupe. Climaxing Saturday evening's fun is the Grand Regatta Ball. The outboard boat races, sanctioned by the American Power Boat Association, will be held Saturday and Sunday.

Dwarfing sparkling Bluestone Lake are the rugged crests surrounding Bluestone Gorge, site of the 1970 outboard Marathon. Preliminaries will be held Friday and the races, set on a 40-to-50-mile course, will be held Saturday and Sunday. Saturday evening, June 20, there will be a special West Virginia Day celebration near the lake race course area.

Over 150 entries from the United States will participate in the Marathon, sanctioned by the American Power Boat Association.

Frontier West Virginia, now just a memory, will be restored for four days during Pocahontas County Pioneer Days. Headquarters for the event, to be held July 9-12, is the museum in Marlinton.

Packed into the excitement are activities such as stagecoach and carriage rides, mountain music and mountain rifle contests plus arts and crafts demonstrations.

Two new events for the children this year will be a turtle derby and frog-jumping contest. A country store will offer an assortment of homemade delights for sale such as crusty homemade bread and applebutter.

Other activities include square dancing, quilt, flower and horse shows, a hymn sing, parade and free wagon rides.

This is just a sampling of the hundreds of events that occur year-round in West Virginia-the state that celebrates everything from wildflowers to ramps, from black walnuts to forests. A complete listing of all West Virginia events is available upon request.

For a Calendar of Events, write Travel Development Div., Dept. of Commerce, State Capitol, Charleston, W. Va. 25305. Join in the fun this year.

HUNTING & CONSERVATION

"For all his alleged irreverence for life, the hunter has done the most to restore and sustain today's wildlife populations. Without him, it is unlikely that any effective wildlife conservation programs would exist today. The hunter himself is directly responsible for the great modern populations of deer, antelope, turkey, pheasant, geese, elk, and a host of non-game creatures associated with the wildlife habitat that the hunter has caused.

"It is inaccurate to say that if it had not been for hunting in the first place, wildlife would never have had to be conserved. America's original wildlife was not

spent by the sporthunter. It was deci-mated by the relentless shooting by settlers, by commercial hunters, but pri-marily by vast changes in the habitat. "Yet, the modern hunter must expect to be criticized for he has openly as-sumed responsibility for game species. He is apparently the only one willing to do so. He can expect to receive full blame if wildlife declines, and no credit if it if wildlife declines, and no credit if it increases

Arizona Game & Fish Dept., Wildlife Views

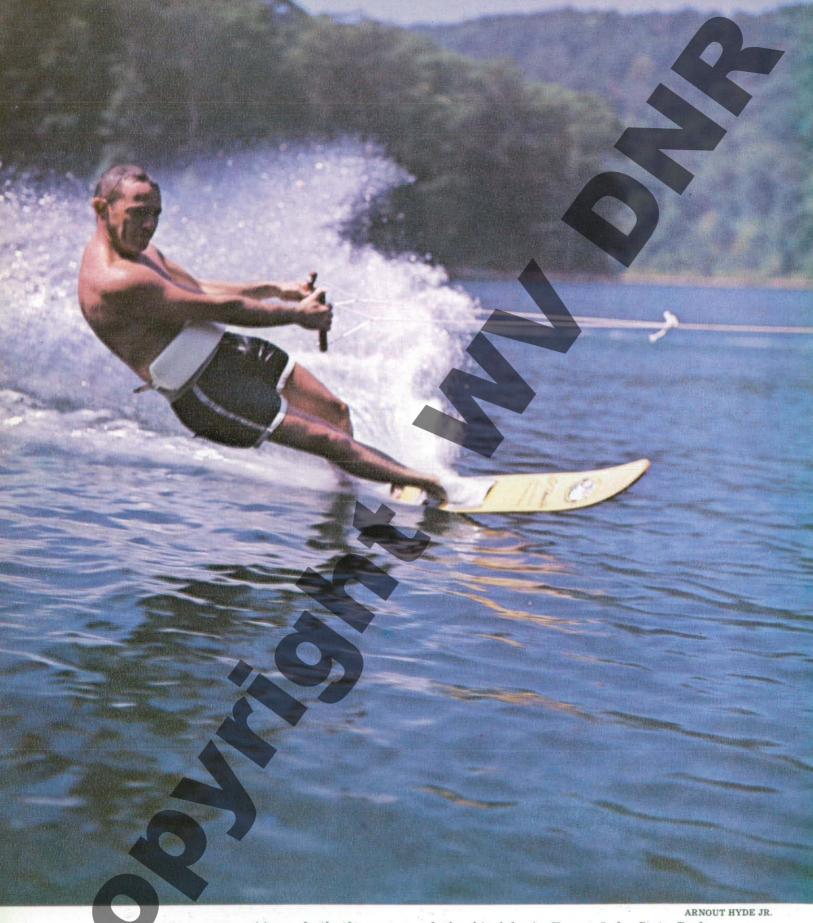
When going fishing take along several rubber bands. When these are wrapped around your wallet and keys, they help prevent them from falling into the water.



PLEASE LEAVE YOUNG WILDLIFE ALONE, Leonard Lee Rue.



Groundhog—one of the most-often seen animals along West Virginia roads during summer. Leonard Lee Rue.



Skittering water skiers froth the waters of the big lake in Tygart Lake State Park in Taylor County.



Whip-poor-will, threatening, is nearly lost in nature's marvelous camouflage. Leonard Lee Rue.

MAN IS BOTH DESTRUCTIVE AND CREATIVE

A VISITOR to the Severn Wildrow Trust complex in England is commented with a large mirror above which is the legend:

"YOU ARE LOOKING AT A SPECIMEN of the MOST DANGEROUS AND DESTRUCTIVE ANIMAL THE WORLD HAS EVER KNOWN..."

When the viewer has pondered this, together with his own image in the mirror, he will see below:

"HE IS ALSO THE MOST MAGINATIVE AND CREATIVE ANIMAL—AND HE HAS EVOLVED A CONSCIENCE. KEEP IT WITH YOU AS YOU GO AROUND THESE EXHIBITS."

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Mail To: Circulation, Outdoor West Virginia, Dept. of Natural Resources State Capitol, Charleston, West Virginia 25305

Please type or print legibly. Make checks, money orders payable to: Department of Natural Resources

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Ira S. Latimer Jr.

HEARTENING CLEAN-UP OF STREAMS BEGUN

Press clippings from throughout the state indicate positively that West Virginians mean business in cleaning up their creeks and rivers which have been dumping grounds for generations. It is one thing to be rightly frightened by the national specter of air, water and land pollution threatening America's survival; it is another thing to show good faith in cleaning the waterways in our own backyard.

I am told that during the intensive clean-up effort on Elk River during 1968, a group of people from the Department of Natural Resources—men and women—were busy picking up bushels of beer cans and other debris at the sandy swimming beach near the mouth of Coopers Creek. A stalwart group of young men paused from their swimming and diving to watch the visiting workers clean trash around the swimming hole. One lad graciously remarked, "We sure are glad to see you cleaning up our swimming beach."

While the Neighborhood Youth Corps is being employed to assist in the streams clean-up campaign, the statewide project will have little success unless it is augmented by massive volunteer efforts of local clubs, organizations, business, and plain citizens.

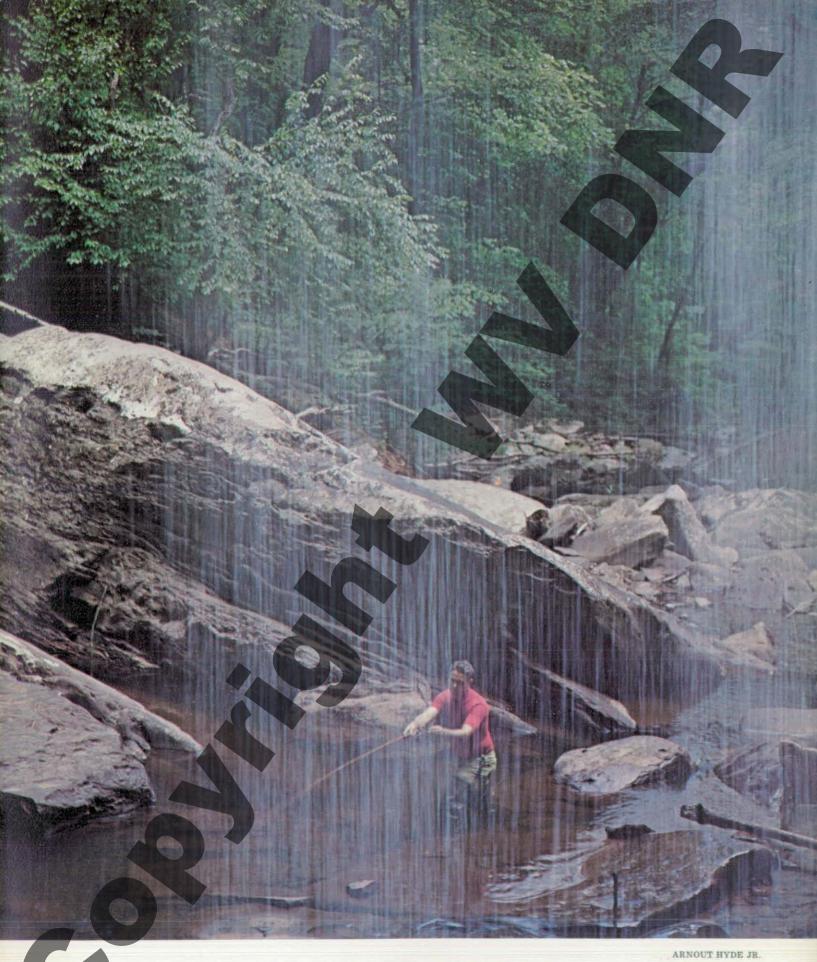
A clean creek, riverside or lakeshore exalts a community, municipality, county, state, nation. Decades ago, Switzerland, Germany and England set examples to the world by showing clean countrysides, which alone proved to be tremendous tourist magnets to these nations; during the same period, however, these countries forgot the Rhine and Thames Rivers, now among the biggest "open sewers" in the world. Of course, America has lagged, too.

A clean stream reflects the pride of a community—big or small—regardless of its efforts in crawling out from municipal and industrial pollution, where we are showing progress.

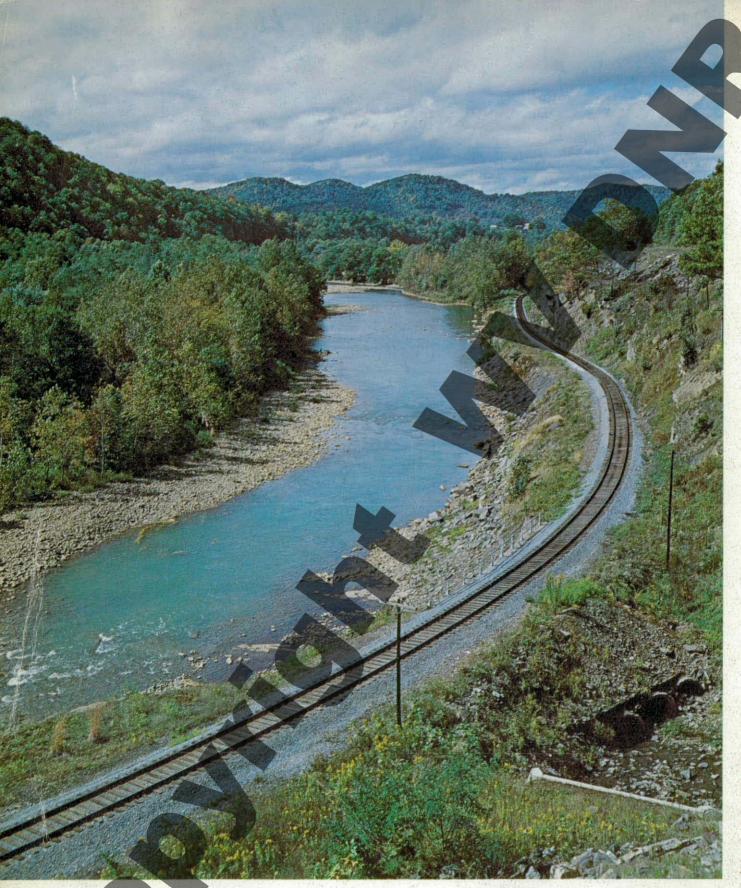
Able citizens who have the time—and who care—will roll up their sleeves this summer and help make outdoor West Virginia a thing of headty, by beginning in their own community.

Your own personal help will give you the right to be proud of the statewide clean streams program. West Virginia belongs to you, too.

IRA S. LATIMER JR.



Brook trouter on Hills Creek can be seen from backdrop of falls in foreground. Monongahela National Forest. Area accessible from Rt. 39 near Kennison Mountain.



Dry Fork River in Tucker County, as seen from Rt. 72.

ARNOUT HYDE JR.